Application No.: 10/550,005

Attorney Docket No.: 01197.0257-00000

AMENDMENTS TO THE CLAIMS:

1. (Original) A microporous polyethylene film, comprising a blend that comprises a high density polyethylene copolymer which has a melt index (MI) of 0.1 to 100 and a content of an α -olefin unit with 3 or more carbon atoms of 0.1 to 1% by mole; and a high density polyethylene which has a viscosity average molecular weight (Mv) of at least 500000 to 5000000, wherein the blend has an Mv of 300000 to 4000000 and a content of an α -olefin unit with 3 or more carbon atoms of 0.01 to 1% by mole.

- 2. (Original) A microporous polyethylene film, comprising a blend that comprises a high density polyethylene copolymer which has a melt index (MI) of 0.1 to 100 and a content of an α -olefin unit with 3 or more carbon atoms of 0.1 to 1% by mole; and a homopolyethylene which has an Mv of at least 500000 to 5000000, wherein the blend has an Mv of 300000 to 4000000 and has a content of an α -olefin unit with 3 or more carbon atoms of 0.01 to 1% by mole.
- 3. (Previously presented) A microporous polyethylene film, comprising a blend that comprises a high density polyethylene copolymer comprising an α -olefin unit with 3 or more carbon atoms, and a high density polyethylene which has an Mv of at least 500000 to 5000000, characterized in that the microporous polyethylene film has a weight fraction measured by GPC of a component having a molecular weight of 1000000 or more of 1 to 40%, and a weight fraction measured by GPC of a component having a molecular weight of 10000 or less of 1 to 40%, the component having a molecular weight of 10000 or less has a content of an α -olefin unit with 3 or more

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carbon atoms of 0.1 to 1% by mole, and the blend has an Mv of 300000 to 4000000, and a content of an α -olefin unit with 3 or more carbon atoms of 0.01 to 1% by mole.

- 4. (Original) The microporous polyethylene film according to any one of claims 1 to 3, wherein the α -olefin is propylene.
- 5. (Original) The microporous polyethylene film according to any one of claims 1 to 4, wherein the polyethylene having an Mv of 5000000 to 5000000 is a blend of two or three kinds selected from the following polyethylenes (A), (B) and (C):
- (A) the polyethylene having an Mv of 1500000 or more and less than 5000000;
- (B) the polyethylene having an Mv of 600000 or more and less than 1500000; and(C) the polyethylene having an Mv of 250000 or more and less than 600000.
- 6. (Original) The microporous polyethylene film according to any one of claims 1 to 4, wherein the polyethylene having an Mv of 500000 to 5000000 is an ultrahigh molecular weight polyethylene having an Mv of 1500000 or more.
- 7. (Original) The microporous polyethylene film according to any one of claims 1 to 6, having a film rupture temperature of 150°C or higher.
- 8. (Original) The microporous polyethylene film according to any one of claims 1 to 7, having a shrinkage force at 150°C of 2N or less.
- 9. (Original) The microporous polyethylene film according to any one of claims 1 to 8, having a fusing temperature of 140°C or lower.

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10. (Original) The microporous polyethylene film according to any one of claims 1 to 9, having a thickness 5 to 24 μm .

- 11. (Original) The microporous polyethylene film according to any one of claims 1 to 10, having a porosity of 30 to 70%.
- 12. (Original) The microporous polyethylene film according to any one of claims 1 to11, having an air permeability of 100 seconds or more and 600 seconds or less.
- 13. (Original) A battery separator, comprising a microporous film according to any one of claims 1 to 12.
- 14. (New) A microporous polyethylene film according to claim 1, which has a weight fraction measured by GPC of a component having a molecular weight of 1000000 or more of 1 to 40%, and a weight fraction measured by GPC of a component having a molecular weight of 10000 or less of 1 to 40%, the component having a molecular weight of 10000 or less has a content of an α -olefin unit with 3 or more carbon atoms of 0.1 to 1% by mole.